Utilizing Communication & Teamwork in the Operating Room to Prevent Errors

Karol A Gutowski, MD, FACS
ASPS Annual Meeting 2013
Instructional Course
Disclosures

Speaker's bureau Angiotech Pharmaceuticals
Speaker's bureau Suneva Medical
Advisor The Doctors Company
Communication Problem

- Routine trunk liposuction
- Same OR team
Communication Problem

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- Same OR team
- Bloody lipoaspirate
Communication Problem

- Routine trunk liposuction
- Same OR team
- Bloody lipoaspirate
- No epinephrine added to infiltration fluid
Importance of Teamwork & Communication

• Essential to deliver high quality & safe patient care
• Failure a common cause of patient harm
• Complexity of medical care & limitations of human performance require clinicians to:
  • Have standardized communication tools
  • Create environment allowing freedom to speak & express concern
  • Share common “critical language” to alert team of unsafe situations
Importance of Teamwork & Communication

• Effective communication is situation & personality dependent

• Other high reliability domains (commercial aviation) have shown that the adoption of standardized tools and behaviors is a very effective strategy in enhancing teamwork and reducing risk
Communication Failures & Effectiveness

- Leading cause of inadvertent patient harm
- Joint Commission analysis of 2455 sentinel events
  - Primary root cause in >70% was communication failure
  - 75% of these patients died
  - Clinicians had divergent perceptions of what was supposed to happen

- Effective communication and teamwork creates a
  - Common mental model (getting everyone in the same movie)
  - Safe environment to speak up with safety concerns
  - No surprises culture
Teams vs Individuals

• Anticipate each others needs
• Adjust to
  - Each others actions
  - Changes in environment
• Have shared understanding of
  - How procedure should happen
  - How to identify errors and correct them
• Have shared responsibility
Communication Obstacle: Training

- Physicians & nurses communicate differently
- Nurses
  - Taught to give broad & narrative descriptions of clinical situations
  - Told they “don’t make diagnoses”
- Physicians
  - Learn to be concise, and get to the “headlines” quite quickly
- SBAR bridges differences in communication styles
Communication Obstacle: Hierarchy

- Hierarchy (power distance) inhibits free communication

- **Authoritarian leaders** reinforce large authority gradients creating unnecessary communication barrier & increase risk

- **Effective leaders** flatten hierarchy creating familiarity & safe environment to speak up and participate
Tools & Behaviors for Effective Communication

- SBAR Communication Tool
- Briefings
- Visual Communication
- Appropriate Assertion
- Critical Language
- Situational Awareness
- Debriefing
SBAR: A Situational Briefing Model

- **Situation**
- **Background**
- **Assessment**
- **Recommendation**
SBAR Applied to Health Care

- **Situation**: What is going on with the patient?
  - Identify yourself and the patient
  - State the problem

- **Background**: What is the background on this patient?
  - Anticipate questions the receiver may have

- **Assessment**: Provide your observations & evaluations of the patient’s current state

- **Recommendation**: An informed suggestion for the continued care of the patient
Briefings

• Standard in aviation, military, law enforcement
• Uncommon in clinical medicine
• A few minutes before surgery gets everyone at the same startpoint, avoid surprises, & positively affect how team works together
• SBAR as a briefing tool
Team Communication

- Use a **Pre Op Briefing** to get every team member to talk
- If everyone is *used to talking* when there isn’t a problem, they will be more likely to *speak up* when a problem occurs
PreOp Briefing using an OR Checklist

NORTHSORE UNIVERSITY HEALTHSYSTEM SURGICAL SAFETY CHECKLIST

Before Induction of Anesthesia → Before Skin Incision → Before Patient Leaves Room

SIGN IN: HOLDING OR AMBULATORY AREA
- Patient Has Confirmed
  - PreOp Note
  - Site and Side
  - Procedure
  - Consent complete and accurate
  - H&P Complete
  - Consent and H&P Plan of Care Reconciled
- Diagnostic/Radiology Results Needed in OR?
- Site Marked/Alternate Used
- VTE Prophylaxis Needed?
  - Yes
  - No
- Does Patient have a known allergy?
  - Yes
  - No
- Blood Products Available?
  - Yes
  - No
- Currently on Anticoagulant?
  - Yes, last taken on:______
  - No
- Glucose Checked for Diabetic Patients?
  - Yes, Value:______
  - Not Applicable
- Currently on Beta Blocker?
  - Yes, last taken on:______
  - No
- Does Patient have Implants or Pacemaker?
- Anesthesia Safety Check Completed
- Expected blood loss of >500ml (7ml/kg in children)?
  - Yes
  - No
- All Above Complete, may proceed to OR
  - Surgeon Confirmed
  - Anesthesia Confirmed
  - RN Confirmed

TIME OUT: ATTENDING SURGEON INITIATES BEFORE INCISION
- Confirm All Team Members Have Introduced Themselves By Name And Role
- Will More Than One Procedure Be Performed?
  - Yes, Second Time Out Required
  - Not Applicable
- Has Antibiotic Prophylaxis Been Given Within The Last 60 Minutes (2 hours if Vancomycin)?
  - Yes
  - Not Applicable
- Surgeon, Anesthesia and Nurse Verbally Confirm:
  - Patient
  - Site
  - Site Side Marked
  - Consent Complete and Accurate
  - Blood Products Available
  - Anesthesia Type
  - Procedure
  - Correct Position
  - Images Available/Displayed
  - Special Equipment Available
  - Implants Available
  - Safety Precautions Based on Past History or Medication Use
- Anticipated Critical Events
- Surgeon Reviews: Diagnosis, anticipated procedure and potential additions or deletions. What are the Critical or Unexpected Steps, Operative Duration, Anticipated Blood Loss?
- Anesthesia Reviews: Type of Anesth? Are There Any Patient Specific Concerns?
- Nursing Reviews: Sterility of Instruments and Implants, Equipment, or Other Issues or Concerns?

SIGN OUT: IN OR WITH ALL TEAM MEMBERS
- Nurse Verbally Confirms With The Team:
  - Post Op Xray Required?
  - The Name of the Procedure Recorded
  - That Instruments, Sponge and Needle Counts are Correct
  - How The Specimen Is Labelled (Labeling done in room in the presence of surgeon)
  - Extra Labels To Be Placed In Paper Chart
  - Whether There Are Any Equipment Problems To Be Addressed
  - Surgeon, Anesthesia and Nurse Review The Key Concerns For The Recovery And Management Of The Patient
  - Concurrence Between Consentated Procedure and Performed Procedure

Primary Responsibility for Leading the Checklist Discussion is Indicated by Color Code:
- Green = Surgeon
- Yellow = Nurse
- Blue = Anesthesia

Place Patient Label Here

NorthShore University HealthSystem
Based on the WHO Surgical Safety Checklist developed by: World Health Organization
Visual Communication

Visual cues to promote
- Track medications
- Communication
- Surgical plan
- Safety
Inquiry, Advocacy & Assertion

Communication tools that benefit the team process

• **Inquiry:** Systematic investigation of facts, principles, or the requesting of information
  
  - A PA receives an order for 10 mg of a postoperative analgesic instead of the normal 5 mg for a particular patient. The PA should feel free to inquire why the dose is different than usual.
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  - A nurse speaks up to protect a patient’s privacy when the patient is under general anesthesia and cannot advocate for herself.
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- **Assertion:** Positively stating or declaring something in anticipation of denial or objection
  - A resident points out that it is in a patient’s best interest to wait for an intra-operative x-ray when the instrument count is not correct.
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*Surgeons may not feel comfortable with this communication style*
Appropriate Assertion

- Ability to speak up & express concerns
- State problem politely & persistently until resolved
- Avoid speaking indirectly (don’t hint and hope)
- Focus on the problem (not who’s “right & wrong”)
- Nurses have license to say: “I need you to ...”
Critical Language: CUSSing

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- **CUS program** (United Airlines)
  - I’m **concerned**, **uncomfortable**, **scared**, this is not **safe**
  - I’m meaning: “We have a problem, stop & listen to me”
  - Tell your team it is OK to CUSS in the OR!
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- Creates a clear communication model
- Avoids tendency to speak indirectly & deferentially
Situational Awareness

- Surgical team
  - Maintains the “big picture”
  - Thinks ahead to plan & discuss contingencies

- Ongoing dialogue
  - Keeps team up to date with what is happening
  - Promotes proper response if situation changes
Debriefing

- Process of assessing:
  - What the team did well
  - What were the challenges
  - What they will do differently the next time

- Opportunity for both individual & team learning
  - Events are still fresh
  - Input from junior team members
  - Opportunity for surgeon to get feedback
OR Video Recording

- 10 high-acuity operations (44 hours patient care)
- 33 deviations from care
  - 17 safety compromises
- 1 every 80 minutes
- Deviations were multifactorial
  - Mean 3 factors
Results of OR Video Recording

Communication & organizational structure at root of deviations

Deviations result from poor organizational and environmental design and suboptimal team dynamics, with caregivers compensating to avoid patient harm
Outcomes in OR

- Wrong site surgeries eliminated
- Decreased nursing turnover
- Increased employee satisfaction
- Increased perception of safety climate
- Improved teamwork climate & communication
- Personnel taking responsibility for patient safety
- Medical errors being handled appropriately
- Nurses feeling their input is well received
Perioperative Briefing Application

OR team challenges in MWL body contouring

- Academic institution
- Multiple procedures
- Patient position changes
- Long operative time
- New equipment
- Multiple concurrent surgical sites
- Residents & students
- Not doing the same way twice
  - “Refining the technique”
Briefing before Patient Marked

Improved process with 2-4 min discussion
- Sequence of procedures
- Estimated times for each procedure
- Timing and specifics of patient positioning
- Rational for new equipment
- How many assistants needed
- What I am going to do different today
- Potential pitfalls (hypothermia)
- Any new members on the team today?
- Any questions?

Dramatic improvement in teamwork, waiting time & frustration level
Communicate with your Patient
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Add check lists
Noise in OR